What the Arts Taught Me about Education Author(s): Elliot W. Eisner Source: Art Education, Vol. 44, No. 5 (Sep., 1991), pp. 10-19 Published by: <u>National Art Education Association</u> Stable URL: <u>http://www.jstor.org/stable/3193290</u> Accessed: 17-07-2015 19:04 UTC

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at <u>http://www.jstor.org/page/info/about/policies/terms.jsp</u>

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.



National Art Education Association is collaborating with JSTOR to digitize, preserve and extend access to Art Education.

This content downloaded from 130.15.241.167 on Fri, 17 Jul 2015 19:04:43 UTC All use subject to <u>JSTOR Terms and Conditions</u>

## What the Arts Taught Me About Education\*

Elliot W. Eisner



Carl Schurz High School Art Exhibit at Chicago Federal Savings, May 26 - June 14, 1958. (From left): Benjamin Keach, President of Chicago Federal; students Joyce Corlett, Barbara Erlandsen, Craig Koch, Martha Winters; and Instructors at Carl Schurz High School, Elliot W. Eisner, John Mulder, and Luella Newell.

What follows is a personal, autobiographical statement. To write about how the arts have influenced my thinking about education demands, at least for me, an examination of the role they have played in my life. I can see no other way to do it.

I must confess that I have thought about this matter many times, but it was not until more recently that I confronted the task of thinking systematically about it. As almost all academics know, writing forces you to reflect in an organized and focused way on what it is you want to say. Words written confront you and give you the opportunity to think again. Thinking on its own, without the commitment that writing exacts, makes tolerable - even pleasurable - the flashing thought, the elusive image. When one writes, the public character of the form demands organization, and when autobiographical the problem of appearing egoistic, or saying too much, or seeming selfpromoting, are constant threats.

I share these concerns with you because I want you to know that for me this is not the usual academic paper; the topic of the paper is me.

Let me begin with a confession that art --- the visual arts --- was a source of salvation for me in the two elementary schools I attended between five and thirteen years of age. I did not do well in elementary school: arithmetic was problematic and frustrating; my handwriting was and is at present not particularly good; spelling was a relentless bore; and English grammar ---- the diagramming of sentences whose features remain before me as vividly now as they were then --- was largely meaningless, even when I was able to correctly indicate the difference between a direct and an indirect object. But art ---ah, that was another story. I was good at art; indeed I was the "class artist" and appreciation for this achievement motivated my third grade teacher, Mrs. Eva Smith (at that time a nearly ancient fifty year old) to suggest to my mother that I should be enrolled in art classes at the School of the Chicago Art Institute.

My mother was both an intellectual woman and someone who prized the arts, particularly music. She wasted no time enrolling me in Saturday morning art classes, which I continued to attend throughout elementary school and into the beginning of high school. Art was then, as it is today, a deep source of pleasure.

High school was even more frustrating for me than elementary school. Aside from art, sports, and girls, my high school classes were dull at best. I did not do well. Out of a class of about four hundred and thirty graduates, I managed to graduate in the thirty-second percentile of my class. The prospects for my future would be lacklustre if I graduated today in the same position as I did then.

After graduating from high school, I enrolled in the School of the Art Institute of Chicago to study painting, and then attended Roosevelt College in Chicago to complete a B.A. in art and in education. It was during those four years — between seventeen and twenty-one — that the marriage of art and education occurred. Let me tell you how.

I grew up in a Jewish community on Chicago's west side. Although there was an exodus of Jews in the 1950's from this part of Chicago to the northern suburbs. our family was among the last to leave. The neighborhood that was once populated with delicatessens and synagogues, virtually one on every corner, became a haven for blacks not only from Chicago, but from other parts of the country. "My" neighborhood had as one of its community resources a boys club, the American Boys Commonwealth, where as a child I spent countless happy hours working with clay, plaster, and paint, and learning to weave and draw. I returned to the ABC during my college years to teach arts and crafts to the black children and adolescents who had moved into the neighborhood. In fact, I taught my art and craft classes in the very same art room in which I had spent such happy days during my own childhood.

The children I encountered, and particularly the adolescents with whom I worked, were poor, and as they were described at that time, were either "pre-delinquents" or "juvenile delinquents" — not all to be sure, but enough of them to help me understand what those terms meant. Establishing rapport was tough, but achievable, and

<sup>\*</sup>This is an adaptation of a chapter in *Reflections* from the heart of educational inquiry: Understanding curricula and teaching through the arts. William Schubert and George Willis, Editors, New York: SUNY Press, 1991.

such victories were very satisfying . My work with these children and adolescents, motivated initially by a desire to learn more about art by examining its sources, soon was converted into an interest in how art could be used to help children grow. My master's thesis at the Illinois Institute of Technology was titled, "The Therapeutic Contributions of Art in Group Work Settings." I became as much interested in the children with whom I worked as in their art; no, even more so.

The opportunities to work with children at risk, as we say today, and to teach art in the Chicago Public Schools after finishing a masters degree in art education, provided a part of the foundation for my commitment both to art and to education. The other part of that foundation was built from the kind of social conscience that growing up in the home of a socialist father and an artistically interested and intellectual mother generated. Discussions about "society," "the working man," and "equality," as well as the importance of education, were almost daily fare.

As important as these two particular sources were, they do not tell the whole story. For example, while at Roosevelt College I had the good fortune of having some superb neo-progressive professors of education who were interested in "deep" learning and who cared about children. What they were concerned about I had become interested in years earlier, and so the congruence between their ideas and my interests were very close. My work as a student in the School of the Art Institute of Chicago taught me invaluable lessons about the importance of both intellectual and emotional commitment to one's own work. Painting was difficult, complex, challenging, and demanded time and the ability, even if one was only nineteen, to commit oneself to its seriousness. In its own special way, the School of the Art Institute of Chicago was a deeply intellectual place, as I think the really well-run high school auto mechanics program can be for today's adolescent. I learned at the Art Institute of Chicago to take work seriously. The fact that some of my fellow students were a decade older than me, veterans of the Second World War going to school on the G.I. Bill, helped in this regard.

Also contributing to my views about education was my experience as a neo-

phyte art teacher working on the fourth floor (where few administrators ventured) in Chicago's Carl Schurz High School. A school for thirty-six hundred students and middle class throughout, this setting gave me the opportunity to discover the deep satisfactions I could receive not only from seeing or making paintings and sculpture, but from helping fourteen and fifteen year olds immerse themselves in the process of creating their own art. I discovered at a level different from what I learned in the American Boys Commonwealth that initiating the young into the pleasures of art and the visual world was for me a very important source of satisfaction. These satisfactions and interests continued and provided a major theme during my doctoral studies in the Department of Education at the University of Chicago. No one on the faculty had a specialized or even a special interest in art education, but my professors provided the space and the support that made it possible for me to continue my interests in this field. I was very lucky.

Chicago also provided the theoretical tools and the intellectual climate that I needed; much of it was like my life as a child at home; ideas were prized almost for their own sake. Analysis, debate, and speculation were common. Much of my experience there was familiar and comfortable. More moments than one has a right to expect were like peak experiences. At Chicago, art and intellect had a happy marriage.

So much for foundations. What difference have these experiences made in the way in which I think about education?

Perhaps the most important contribution that my immersion in the visual arts has made to my views of education is the realization that neither cognition nor epistemology can be adequately conceptualized if the contributions of the arts to these domains are neglected. Those of us professionally socialized in education, not to say the culture at large, have lived in a sea of assumptions about mind and knowledge that have marginalized the arts by putting them on the back-burners of mind and understanding. To engage in cognitive activities, we have been told, is to mediate thought linguistically, to use logic in order to monitor thinking, and to escape the limiting concreteness of the particular in order to experience the loftiness of the

general. Plato's conception of knowledge as thought liberated from the senses and Piaget's ideal of formal operations as the apotheosis of cognition represent for most in education what it means to engage the mind (Gardner, 1989).

As for knowledge, the legacies of Compte and positivism in its various forms put the arts beyond the margins of knowledge (Ayer, N.D.). To know, the positivists tell us, is to make meaningful assertions, that is, to state propositions or make claims about the empirical world whose truth (or falsity, at least) can be tested. What one cannot say, one cannot know. Given this view, how can a non-propositional form and these forms include not only the visual arts, music, and dance, but also literature and poetry — be regarded as having any epistemic functions at all (Phillips, 1987). The answer is clear; they cannot.

The result of such beliefs, often unexamined at that, is to promote a hierarchy of knowledge that enthrones scientific knowledge and expels the arts from cognition entirely. The arts, as everyone knows (given these beliefs), are affective, not cognitive, and in our educational institutions we are hell-bent on cognition. Given the prevailing view, the arts are nice, but not really necessary (Broudy, 1979).

My own experience in the arts as a painter contradicted these narrow views of what the thinking mind did or how it was we come to know. It was clear to me as a doctoral student at the University of Chicago that the creation of a successful painting or an expressive sculpture could in no way be dismissed as a consequence of emotion finding its release in a material. The job of making a painting, or even its competent perception, requires the exercise of mind: the eye is a part of the mind, and the process of perceiving the subtleties of a work of art is as much of an inquiry as the design of an experiment in chemistry. As a painter I grappled with the problem of trying to make a picture "work" - often unsuccessfully. Painting was no easy task. Matters of visualization, technique, composition, sensibility, and inventiveness were required. And all of these skills and abilities were employed on a dynamic configuration; things were always changing, and the most subtle alteration of a passage in one section of an

image required attention to a variety of others as well. To conceive of the arts as the discharge of affect was to miss the point of what they were about and, more important, to neglect a resource that could have a major contribution to make to the developing mind. Such ill-conceived notions, I thought, must surely be apparent. Yet all around, the arts were a nonissue. Even the educational scholars I respected the most paid little attention to their potential role in our schools.<sup>1</sup>

My work in the arts as a painter made it perfectly clear that cognition, by which I mean thinking and knowing, is not limited to linguistically-mediated thought, that the business of making a picture "that works" is an awesome cognitive challenge, and that those who limit knowing to science are naive about the arts and in the long run injurious to the children whose educational programs were shaped by their ideals.

I must confess that the foregoing beliefs were, early in my academic career, convictions that were derived intuitively from my experiences as a painter. It was not until I read the work of Rudolf Arnheim (1990), Susanne Langer (1942), and John Dewey (1934) that I encountered respected scholars whose work supported my intuitions. And when I read Michael Polanyi's *Personal Knowledge* (1958) — a book I encountered years after it was first published — my sense of being vindicated grew.

My appreciation for the kinds of thinking that qualitative mediation and qualitative problem-solving elicited led quite quickly to the view that if education was to do more than develop a small part of human cognition, it had to give the young opportunities to work in the arts. The arts were mind-altering devices and the curriculum the major means through which such alteration could be fostered. To underestimate their importance in the array of cultural resources that the school could make available was to do a significant

<sup>&</sup>lt;sup>1</sup>Two exceptions were Jacob Getzels whose background in literature permeated his observations about education and John Goodlad who intuitively knew that the arts were an important aspect of programs for children and adolescents. Both Getzels and Goodlad supported my interest in the arts, although neither taught courses on the arts in education.

disservice to the young. Making a place for the arts in our schools became for me a kind of cause, a cause in the name of a balanced and equitable education.

It is both interesting and gratifying to find that both developmental and differential psychologists have discovered the arts. Gardner (1983), for example, argues the case for a mutliple theory of intelligence and makes place for the arts within the seven modes of intelligence he describes. Snow (1986), likewise, recognizes aptitude differences in learning and the importance of formulating curricula that allow children to play to their strengths. The new-found cognitive pluralism and the greater willingness of psychologists to recognize "practical knowledge"<sup>2</sup> harkens back to an Aristotelian distinction between the ways in which knowledge is secured and displayed. The upshot of these interests is the liberalization of views about the nature of intellect and the provision of a wider and more generous conception of what it means to be smart. I confess that I sometimes feel like someone standing on the sandy beach of a fog-swept sea watching a row boat filled with cognitive psychologists searching for the shore. I sometimes see myself waving to those aboard and shouting to them; "Over here! Come over here! What's taken you so long?"

I know that such personal revelations make me appear smug; I do not intend for that impression to be conveyed, but those of us who have devoted so much of our professional lives trying to make a place for the arts in education have been waiting for a very long time. To be perfectly candid, although the row boat is closer now to the shore than it once was, it has not yet docked.

You will recall that I said that cognition referred not only to skills, but also to knowledge. The creation of a picture, or a poem, or a musical composition requires,

at minimum, knowledge of the unfolding qualities with which one works. These cognitively-mediated qualities must be seen, modulated, transformed, and organized in the course of one's work. It is clear to anyone who has struggled with the task of doing so that there are no linguistic equivalents to the qualities experienced in this process. To reduce knowledge to warranted assertions, true propositions, or falsifiable claims that have withstood falsification is to be oblivious to the fact that in-so-far as such claims refer to empirical qualities, they are never their equivalent. The map is not the territory. To draw the map, the territory first has to be known in other ways.

I was not willing to reduce knowledge to the kinds of truth tests that positivists or neo-positivist philosophers required. Furthermore, knowledge of the qualities of works of art are not limited to the qualities found in works of art alone. It was clear that the qualitative subtleties of the world outside of art --- the comportment of people, the look of a city street, the tone of voice as it speaks --- these and an infinite array of others were objects of knowledge by a seeing eye and a hearing ear. Language is, in a way, our heroic effort to transform what we have come to know directly into that public surrogate we call text. When text is itself artistically rendered, we can begin to approximate the virgin experience it is intended to convey.<sup>3</sup>

Appreciation of qualitative sources of knowledge led me to reject conventional wisdom; why restrict knowledge to what verificationists or falliblists demand. To do so would be like limiting the content and aims of education to what psychometricians are able to measure. It made no sense to me to try to consign knowledge to a piece of paper the size of a bubble gum wrapper, all in the service of verification. Thus, it becomes increasingly important to me not only to broaden our view of what it means to think, it was equally as important to enlarge our view of what it means to

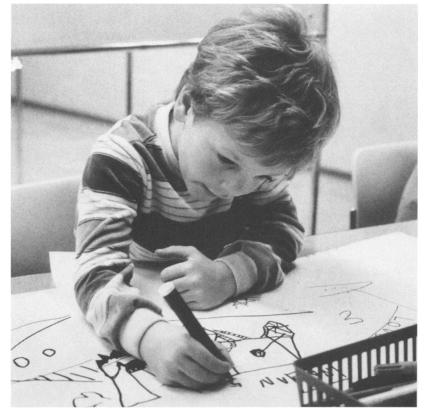
<sup>&</sup>lt;sup>2</sup>The concept "practical knowledge" reverberates in current discussions of "situated knowledge," a phrase being used increasingly among cognitive psychologists to underscore the differences between learning within an academic setting and the kind of knowledge that students can act upon in situations outside of the classroom. The family resemblance, it seems to me, between Aristotle's distinction between practical and theoretical knowledge is quite apparent, even when psychologists do not harken back to its roots.

<sup>&</sup>lt;sup>3</sup>Suzanne Langer's point that both literature and poetry are non-discursive is directly related to her argument that the artistic formation of language presents a form of feeling that can be known only through the way in which a form — language — has been shaped. Artistic form, for Langer, has an important epistemic function.

know. In this effort cognitive pluralists such as Nelson Goodman (1978) became important allies.

To illustrate the ways in which the arts enlarge our knowledge of the world, consider two complementary processes that they engender: individuation and generalization (Amheim, 1990). The refinement of the perception of idiosyncratic features of objects or events is one of the two major lessons that learning to draw, sculpt, compose, or write artisticallyfocused language develops. To draw a tree or the particular comportment of a seated figure, the artist must not only notice that the object to be drawn is a tree or a figure, but a *particular* tree or figure. To do this the artist must avoid the premature classification that is typically fostered by schooling and instead, remain open to the particular features and overall conformations of individual forms. No tree, no oak tree, no vound oak tree is the same as any other young oak tree. The task the artist faces is to experience individual features of this tree, of this person, and to create a form that succeeds in revealing the essential and unique features of the object seen. In the process of revealing what is individual, the work also --- ironically --- becomes what Arnheim (1990) calls a canonical image through which the features portrayed through the visual rendering of a distilled particular can be used as a generalizable image to locate similar features found elsewhere. In this process the image becomes a concrete universal, a means through which perception is sensitized so that it can locate like qualities. Such functions are performed through literature, poetry, dance, as well as the visual arts. Othello is about more than Othello.

It is ironic, to say the least, that schools should pay so much attention to the process that Dewey (1934) called recognition, and so little attention to the processes of perception. All (so-called) abstract knowledge depends upon the ability to relate language to images; infinity, kindness, masculinity, envy are imagic in character; the sources of these images are in the extrapolation of qualities seen: infinity — time and space, kindness subtle degrees of care experienced, masculinity — the features we learn in our culture to stand for maleness, envy — the



• Vivienne della Grotta 1986

way in which individuals respond to each other. In fact, we have no words that can adequately reveal the meanings to which these terms refer. To the extent to which our imagination is impoverished, to that extent the meanings of these terms also will be. Imagination is fed by perception and perception by sensibility and sensibility by artistic cultivation. With refined sensibility, the scope of perception is enlarged. With enlarged perception, the resources that feed our imaginative life are increased. Thus one of the lessons I have learned from art that has influenced my views of education is that it is through the refinement of sensibility that language secures its semantic character; another is that the eye is a part of the mind; a third, is that not all that we can know, we can say. Polanyi (1967) was right: we know more than we can tell.

The practical and normative implications for curriculum of these ideas I believe to be more than substantial. Like the arts, the school curriculum is a mind-altering device; it is a vehicle that is designed to change the ways in which the young think. If the arts develop particular mental skills, the ability to experience qualitative nuance, for



• Vivienne della Grotta 1986

example, and if they inform about the world in ways unique to their form, then their presence in our programs for the young are likely to foster such outcomes; their absence the opposite. Thus when we think about the arts not simply as objects that afford pleasure, but forms that develop thinking skills and enlarge understanding, their significance as a part of our educational programs become clear. Curricula in which the arts are absent or inadequately taught rob children of what they might otherwise become.

Thus far I have spoken of the contributions of the arts within the curriculum in fairly general terms. While it is true that all art forms share some common features, there are significant differences as well. The cadences of poetic language are not those of symphonic form; the rhythms of visual form are different from those found in literature or dance. At the most obvious level, differences among the arts are (usually) differences in the sensory modalities appealed to. They are images experienced through the funded perception of the form or genre in which any particular work participates. What this means is that the development of sensibility and judgment profits - indeed often requires - a memory of forms related to the one being encountered (Eisner, 1991). The curricular implication of this observation is that the

educational benefits of the arts are secured not simply by their short term presence, but by sustained experience with like forms. It takes time, effort, and experience to learn how to read a complex and subtle array of qualities. Each of the different art forms participates in a different history, has its own features, and utilizes different sensory modalities. By learning to create or perceive such forms, the arts contribute to the achievement of mind.

The difference among the various arts are not only differences that count in calculating their educational value. There are important differences within a specific art form. Different forms of visual art, for example, may be said to appeal to different parts of our body. Surrealist art, in both its perception and creation, calls upon the individual to take leave of reality and to enter into a sur real world. Fantasy, dreams, reverie are the stuff upon which the surreal depends. Children introduced to such work or to activities that invite them to create it, experience a different kind of "ride" than those working with the French impressionists. My point here is that styles of art - cubism, de stijl, constructivism, minimalism, realism, pop and op art, expressionism --- call upon different aspects of ourselves. Which art forms are selected and what tasks are set in the curriculum have consequences for that aspect of our being to which the form speaks. The same case can be made for music, dance, and literature.

Thus, another of the lessons I've learned from the arts is that while they share commonalities, different forms of art put me in the world in different ways. They speak to different aspects of my nature and help me discover the variety of experiences I am capable of having. I believe that such lessons have implications for educational policy and for deciding about what knowledge is of most worth.

As fundamental as curriculum is, no curriculum teaches itself. The curriculum is always mediated. It is in the description and improvement of teaching that the arts have a special contribution to make.

It has been relatively recent that it has become legitimate to think about teaching as an art form. The dominant image and ideal has been, and in most quarters still is, a technical one. The general model is for educational researchers to do the basic

social science, to pass on to teacher trainers what they have discovered, who in turn inform would-be and practicing teachers of "what works." This model has increasingly been regarded as oversimplified and by some, down-right wrong (Broudy, 1976). New and more adequate views address the epistemology of practice (Atkin, 1989) and acknowledge the differences between theoretical knowledge and practical deliberation (Schwab, 1969). The importance of the context is recognized even by cognitive scientists when they talk about "situated knowledge" (Greeno, 1989). Yet, for all of these developments, it is telling to note that the Third Handbook of Research on Teaching (Wittrock, 1986), a tome weighing over four and a half pounds and containing over eight hundred entries in its index, has no listing under the heading "Art" with respect to teaching. To be sure, there is a heading referring to art, but it is to the teaching of art, not to the art of teaching.

My work in the arts has influenced my view that teaching is an artistically pervaded activity- at least at its best. Teaching is artistic in character in many of the ways in which all art is artistic: it provides a deep sense of aesthetic experience to both perceiver and actor when it is well done (Eisner, 1982). It requires the teacher to pay attention to gualitative nuance --- tone of voice, the comportment of students, the pervasive quality of the teaching episode. It requires the teacher to attend to matters of composition in order to give the day or lesson coherence. It often requires flexibility in aims and the ability to exploit unforeseen opportunities in order to achieve aims that could not have been conceptualized beforehand. Teaching is a constructive acitivity whose efforts result in forms that can provide what the fine arts are intended to provide — a heightened consciousness and aesthetic experience.

Because theoretical models are idealized structures and research results abstractions referring to absent populations, no teacher can rely upon them exclusively for dealing with particular students in particular classrooms in particular schools. Like all artistic activities, the features of the specific material or situation must be addressed without relying upon algorithms for decision-making.

These features of teaching seem

perfectly plain to me. They are less clear to many others, although as I have indicated, the field of education is moving toward a more artistically conscious view of the nature of teaching than it has in the past (Kagan, 1989). When there is a willingness to recognize the artistic nature of excellent teaching and to acknowledge the inherent limitations of the social sciences in guiding teachers, possibilities emerge for treating the improvement of teaching in ways that are not unlike those used to improve individual performance in any art (Atkin, 1989). When such ways are examined, attention to nuance in performance becomes crucial and the use of a language through which it can be revealed, essential. These processes are examples of connoisseurship and criticism (Eisner, 1985).

What the arts have taught me is that nuance counts, in teaching no less than in painting. It has taught me that not everything can be reduced to quantity and that the attempt to do so creates a destructive form of reductionism and a misleading sense of precision. I have learned from the arts that poetic language is often needed to *render* a performance vivid, and that suggestion and innuendo are often more telling than stark statement of fact.

The logical categories and operational definitions that appear so attractive in the social sciences are, in my view, often misplaced in so fragile and delicate an enterprise as teaching. Although the traditional ambition of nailing down the facts and measuring the outcomes have long been sources of cognitive security for some, they are beginning to give way to a more elastic but relevant form of disclosure. That is one of the reasons why ethnography is now seen as a useful way to understand classrooms and schools. When Clifford Geertz (1988) says that anthropological authority often emanates from the ways in which some anthropologists write, he recognizes the artistic contributions to anthropological scholarship. Geertz is by no means alone. The previously sacrosanct methods and criteria for social science inquiry, methods that once aspired to those of physics, are being reconceptualized and widened in the process. The direction is toward the arts.

The conceptualization of teaching as an artistic activity and the acceptance of epistemological pluralism have opened the



Vivienne della Grotta 1987

door to a form of evaluation that is rooted in the arts and humanities. Educational connoisseurship and educational criticism (Eisner, 1985) are efforts to use and extend aims and methods employed to heighten awareness of works of art to educational practice. Connoisseurship is the art of appreciation; criticism the art of disclosure. They are means with which to see and to articulate the qualities and values of particular works of art by using a language that helps others see those works more completely. The genre of educational criticism is literary. While an educational critic might use some of the techniques of the cultural anthropologist, interviewing students, for example, the aims of the critic's work is not anthropological, it is educational. It is intended to heighten awareness of the classroom or of teaching, or of the materials students and teachers use. It is critical, interpretive, and often poetic in flavor. From the arts I have learned that such efforts can amplify perception and expand consciousness of what otherwise might go unseen. Much of my own work over the last two decades has been aimed at elucidating that model and fostering its legitimation in the field of education. I believe much progress has been made.

Another lesson I learned from the arts deals with how we think about the outcomes of educational practice. In the standard model of rational educational planning, the task confronting the planner is, first, to be clear about his or her objectives, to specify them in detail and, if possible, to define them in measurable terms.<sup>4</sup> By using this model, curriculum development is believed to be made easier because clarity of aims is thought to facilitate the invention of means for their achievement. In addition, aims, by and large, are to be common among students of the same age levels, as are the tests they are to take to demonstrate competency. The education summit talk of September, 1989 about national goals for America's schools, defined in measureable terms, is nothing less than the rationale I have described directing educational policy at the highest levels of our government. Clarity of expectation subjected to a common form of examination using standardized criteria meets the accepted canons of rationality and objectivity.

My experience in the arts has taught me a different lesson. From the arts I have learned that not only cannot all outcomes be measured, they frequently cannot be predicted. When humans work on tasks, they almost always learn more and less than what was intended. Furthermore, teaching that is not hog-tied to rigid specifications often moves in directions and explores ideas that neither the students nor the teacher could envision at the outset. In addition, virtue in education is much more than achieving uniformity in outcomes among students. Such an aim might be defensible in a training program, but when one values individual vision and personal creativity, the specter of all fourth graders marching at the same pace to the same drummer toward the same destination is a

<sup>&</sup>lt;sup>4</sup>The salience of hyper-rationalized views of educational planning as represented in the work of Robert Mager and James Popham has diminished in recent years. However, it is well to recall how oversimplified conceptions of "intelligent" professional planning undermined genuine professionalism among teachers by its failure to appreciate the need for what Dewey referred to as "flexible purposing." As teachers have a larger say in schools, the acknowledgement of artistry and the need for flexibility is likely to increase.

vision that better fits the current People's Republic of China than a nation aspiring to become a genuine democracy. In short, educational practice does not display its highest virtues in uniformity, but in nurturing productive diversity. The evocation of such diversity is what all genuine art activities have in common. Even art forms as apparently restrictive as the music of the baroque or the brush painting of the Meiji Period in Japan made it possible for artists to improvise in order to reveal their own personalities in their work. Educational programs, I learned from the arts, should not be modeled after the standardized procedures of the factory; the studio is a better image.

When one seeks not uniformity of outcome, but productive diversity, the need to create forms of evaluation that can handle uniqueness of outcome becomes increasingly apparent: The multiple-choice test will no longer do. Any approach that prizes such outcomes forgoes commensurability, a source of deep security for many. When we cease putting all children on the same statistically derived distribution, we have to think and judge, we have to interpret what it is that they have done. We move more and more towards connoisseurship. And when we talk to others about what we have learned, we move more and more towards criticism, that age-old process of interpretation and appraisal. An artistic perspective, once taken, colors the way we see all facets of the educational enterprise; it is not restricted to a bit here and a piece there.

What then have I learned from the arts that has influenced the way I think about education? I have learned that knowledge cannot be reduced to what can be said. I have learned that the process of working on a problem yields its own intrinsically valuable rewards and that these rewards are as important as the outcomes. I have learned that goals are not stable targets at which you aim, but directions towards which you travel. I have learned that no part of a composition, whether in a painting or in a school, is independent of the whole in which it participates. I have learned that scientific modes of knowledge are not the only ones that inform and develop human cognition. I have learned that as a constructive activity science as well as the fine arts are artistically created structures. I

have learned these lessons and more. Not a bad intellectual legacy, I think. And not a bad foundation on which to build better schools for both children and teachers.

Elliot W. Eisner is Professor of Education and Art at Stanford University, Stanford, California, and President-Elect of the American Educational Research Association.

## References

- Arnheim, Rudolf, (1990), Notes on art education, Los Angeles: The J. Paul Getty Center for Education in the Arts.
- Atkin, Myron, (1989), Can educational research keep pace with educational reform?, *Kappan*, Vol. 71, No. 3, November, pgs. 200-205.
- Ayer, A.J., (N.D.), Language, truth and logic, New York: Dover, N.D.
- Broudy, Harry, (1976), The search for a science of education, *Kappan, 58* (1), September, 104-11.
- Broudy, Harry, (1979), The arts in education: Necessary or just nice, *Kappan, 60* (5), January, 324-50.
- Dewey, John, (1934), Art as experience, New York: Minton, Balch and Co.
- Eisner, Elliot W., (1983), The art and craft of teaching, Educational Leadership, 40 (4), January, 4-13.
- Eisner, Elliot W., (1985) The educational imagination, second edition, New York: Macmillan and Co.
- Eisner, Elliot W., (1991), *The enlightened eye*, New York: Macmillan and Co.
- Gardner, Howard, (1983) Frames of mind: The theory of multiple intelligence, New York: Basic Books, Inc.
- Gardner, Howard, (1989), *To open minds*, New York: Basic Books.
- Geertz, Clifford, (1988) Works and lives: The anthropologist as author, Stanford: Stanford University Press.
- Goodman, Nelson, (1978), Ways or worldmaking, Indianapolis: Hackett Publishing Co.
- Greeno, James, (1989), A perspective on thinking, American Psychologist, 44 (2), February, 134-141.
- Kagan, Dona M., (1985), The heuristic value of regarding classroom instruction as an aesthetic medium, *Educational Researcher*, 2 (6), August-September, 11-17.
- Langer, Susanne, (1942), *Philosophy in a new key*, Cambridge: Harvard University Press.
- Phillips, D. C., (1987), Validity in qualitative research, or why the worry about warrant will not wane, *Education and Urban Society, 20* (1), November, 9-24.
- Polanyi, Michael, (1958), *Personal knowledge: Toward a post-critical philosophy*, Chicago: The University of Chicago Press.
- Polanyi, Michael, (1967), *The tacit dimension*, London: Routledge and Kegan Paul.
- Schwab, Joseph, (1969), The practical: A language for curriculum, *School Review, 78* (1), November, 1-23.
- Snow, Richard E., (1986), Individual differences and the design of educational programs, *American Psychologist*, *41* (10), 1029-1039.
- Wittrock, Merlin, (1986), *Third handbook on research* on teaching, New York: Macmillan Publishing Co.